

Report to the School Committee: 2016 PARCC Assessment System Performance, Growth, and Results

Introduction

The Massachusetts state-wide assessment program has been in flux over the past several years as the Board of Elementary and Secondary Education has grappled with the controversial issue of continuing with MCAS or shifting to PARCC as the state assessment of choice. On November 17, 2015, the Board of Elementary and Secondary Education resolved this issue with a vote to move forward with MCAS 2.0, a Massachusetts specific assessment that is built off of the PARCC framework.

As the question of what a next generation assessment might look like in Massachusetts was unfolding, the Board voted to offer both the MCAS and PARCC assessments for 2015 testing and gave districts the choice of which assessment they would like to use for their students. By way of review, the Shrewsbury School Committee voted to take the PARCC exam in place of the MCAS exam in grades 3-8 for the Spring 2015 state testing program. Students at the elementary level took the paper based version of the test, while students at the middle level took the computer based version of the test. By selecting this option, the district and students were provided with with a low stakes opportunity to become familiar with the PARCC exam. The district approached this testing with the perspective that the 2015 PARCC assessment results would provide educators, parents and students with an initial baseline of how well individual students and the district as a whole are prepared to successfully respond to expectations of the next generation of assessments.

As part of the MCAS 2.0 adoption plan that was approved on November 17, the Board decided that districts that took the PARCC in 2015 would continue to do so in 2016, and districts that took the MCAS in 2015 would have the choice of continuing with MCAS or shifting over to the PARCC. Across the state, in grades 3-8, 72% of districts took PARCC and 28% took MCAS. As Shrewsbury had elected to take the PARCC in 2015, our district was required to continue with this assessment for 2016. Once again, grades 3 and 4 took a paper copy of the test, while students in grades 5-8 took the assessment on-line.

Given the substantial amount of transition occurring in the state testing program and the wide number of variables that exist from district to district, it is advisable to be aware of student performance data, but to be extremely cautious around drawing any conclusions or comparisons about the progress and growth of Shrewsbury students based on this data.

One indication of the transitional nature of this data is that the DESE did not report a state average for PARCC scores for the 2016 test administration nor did they provide any item analysis for the PARCC exam. As a result, there is currently no data that would allow for analysis around the strengths and challenges of our students' performance on this exam.

Accountability Data

Shrewsbury Public Schools received a Level 2 classification for accountability and assistance. Each district with sufficient data is classified into levels 1-5 with Level 1 as the highest performing. For a district to be considered to be making progress toward narrowing proficiency gaps, both the “all students” groups and the high needs student sub groups make designated progress. Districts are classified based on the level of the lowest performing school. Shrewsbury received a Level 1 classification in 2015 and a Level 2 classification in 2016. The subgroup that experienced the greatest struggle in terms of meeting proficiency targets was *Students with disabilities*. The link to the details for the Shrewsbury accountability report can be found below:

<http://profiles.doe.mass.edu/accountability/report/district.aspx?orgtypecode=5&linkid=30&fycode=2016&orgcode=02710000>

School	Accountability and Assistance Level
Calvin Coolidge	1
Floral Street School	1
Walter J Patton	1
Spring Street	1
Sherwood Middle School	2
Oak Middle School	2

Shrewsbury Sr High	2
Beal School	N/A
Parker Road Preschool	N/A

Test Administration by Grade Level and Subject

- This table shows the subject areas and grade levels that were assessed using PARCC and those that were assessed with MCAS. The DESE has communicated that all students will continue to take MCAS in Grade 10 at least through the class of 2018 (this year's current juniors). As PARCC was only designed to assess students in ELA and Mathematics; the MCAS Science test continues to be given at the usual grade levels.

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9/10
English Language Arts/Reading - PARCC							
English Language Arts/Reading - MCAS							
Mathematics - PARCC							
Mathematics - MCAS							
Science and Technology - MCAS							

This report is broken down into three main sections, each providing information and data related to 2016 PARCC and MCAS testing results. The first section focuses on performance results, how Shrewsbury students performed in terms of achievement scoring. The second section concerns student growth. Student growth, which was utilized on a full scale for the first time in Massachusetts in 2010, provides a metric for how students 'grow' in comparison to peers with similar testing histories. Finally, the third section focuses on plans and focus area for the future.

The information in this report is meant to provide a macro view of PARCC and MCAS results for the entire district.

PARCC Performance Levels

PARCC differs from MCAS in the way that it reports out performance levels. PARCC does not use the *Advanced, Proficient, Needs Improvement and Warning* labels, instead, it uses a system of 5

levels of performance. Results that fall in the Level 4 or 5 categories are considered evidence of proficiency. Please see below for a description of each category:

- Level 1: Did not yet meet expectations
- Level 2: Partially met expectations
- Level 3: Approached expectations
- Level 4: Met expectations
- Level 5: Exceeded expectations

Performance Results – English Language Arts

Five-year history of Shrewsbury's MCAS/PARCC results in English Language Arts

Two-year history of Level 4 and Level 5 results in English Language Arts (Grades 3-8 PARCC only)

Two-year history of Level 5 results in English Language Arts (Grades 3-8 PARCC only)

Five -year history of Advanced/Proficient (Grade 10 MCAS only)

Five-year history of Advanced (Grade 10 MCAS only)

District Subgroup Performance (Grades 3-8 PARCC only)

District Subgroup Performance (Grade 10 MCAS only)

District % Level 4/Level 5 (Grades 3-8) and Advanced/Proficient Comparison (Grade 10)

1. Five-year history of Shrewsbury's MCAS/PARCC results in English Language Arts (ELA)

Grade 3 ELA

	Advanced	Proficient	Needs Improvement	Warning	
2012	36	48	14	3	
2013	33	47	17	2	
2014	28	50	18	5	
	Level 5	Level 4	Level 3	Level 2	Level 1
2015	22	58	13	5	2
2016	21	60	12	4	3

Grade 4 ELA

	Advanced	Proficient	Needs Improvement	Warning	
2012	49	40	9	3	
2013	35	49	13	3	
2014	39	41	17	3	
	Level 5	Level 4	Level 3	Level 2	Level 1
2015	45	41	10	3	1
2016	31	49	15	5	1

Grade 5 ELA

	Advanced	Proficient	Needs Improvement	Warning	
2012	41	42	12	5	

2013	39	45	13	4	
2014	35	46	16	3	
	Level 5	Level 4	Level 3	Level 2	Level 1
2015	14	61	17	6	2
2016	16	63	15	4	1

Grade 6 ELA

	Advanced	Proficient	Needs Improvement	Warning	
2012	44	43	9	4	
2013	39	50	8	4	
2014	37	50	11	3	
	Level 5	Level 4	Level 3	Level 2	Level 1
2015	25	53	16	4	1
2016	26	49	16	7	2

Grade 7 ELA

	Advanced	Proficient	Needs Improvement	Warning	
2012	32	58	8	3	
2013	29	60	9	2	
2014	24	64	9	3	
	Level 5	Level 4	Level 3	Level 2	Level 1
2015	35	45	10	6	3
2016	36	42	13	7	3

Grade 8 ELA

	Advanced	Proficient	Needs Improvement	Warning	
2011	45	46	6	2	
2012	31	62	5	2	
2013	35	55	7	4	
2014	33	59	6	3	
	Level 5	Level 4	Level 3	Level 2	Level 1
2015	35	44	14	5	2
2016	27	51	14	5	4

Grade 10 ELA

	Advanced	Proficient	Needs Improvement	Failing
2012	62	35	1	2

2013	72	26	1	1
2014	70	27	2	1
2015	76	23	1	0
2016	73	23	2	2

2. Combined Performance in Level 4 and Level 5 Categories for PARCC ELA Grades 3-8

% Students Scoring Level 4 and Level 5 in PARCC ELA

Grade and Subject	Gr 3 ELA % Level 4/5.	Gr 4 ELA % Level 4/5.	Gr 5 ELA % Level 4/5.	Gr 6 ELA % Level 4/5.	Gr 7 ELA % Level 4/5.	Gr 8 ELA % Level 4/5.
Shrewsbury % Level 4/5 2015	80	86	75	78	80	79
Shrewsbury % Level 4/5 2016	81	80	79	75	78	77

3. Performance in Level 5 Category for PARCC ELA Grades 3-8

% Students Scoring Level 5 in PARCC ELA 2015-2016

Grade and Subject	Gr 3 ELA % Level 5	Gr 4 ELA % Level 5	Gr 5 ELA % Level 5	Gr 6 ELA % Level 5	Gr 7 ELA % Level 5	Gr 8 ELA % Level 5
Shrewsbury % Level 5 2015	22	45	14	25	35	35
Shrewsbury % Level 5 2016	21	31	16	26	36	27

4. 5 Year History of Combined Performance in Advanced/Proficient Categories (Grade 10 MCAS ELA)

% Students Scoring in Advanced or Proficient in MCAS ELA 2012-2016

Grade and Subject	Shrewsbury % Adv/Pro. 2012	Shrewsbury % Adv/Pro. 2013	Shrewsbury % Adv/Pro. 2014	Shrewsbury % Adv/Pro. 2015	Shrewsbury % Adv/Pro. 2016	% Change 15-16	State Avg. % Adv/Pro 2016
Grade 10 ELA	97	97	97	97	96	-1	91

5. 5 Year History of Performance in Advanced Category for (Grade 10 MCAS ELA)

% Students Scoring Advanced in MCAS ELA 2012-2016

Grade and Subject	% of students Advanced 2012	% of students Advanced 2013	% of students Advanced 2014	% of students Advanced 2015	% of students Advanced 2016	% Change 15-16	State % of students Advanced 2016
Gr 10 ELA	62	72	70	74	73	-1	47

6. District Subgroup Performance –ELA PARCC 2016 Grades 3-8

Currently, state average sub-group data for the Spring 2016 administration of PARCC is not available. The 2016 data reflects Grades 3-8 ELA only.

AYP Subgroup (2016)	Shrewsbury % Level 4/5 2015	Shrewsbury % Level 4/5 2016
All Students (2,857)	80	78
Stud. w/Disab. (392)	32	33
LEP/FLEP (175)	59	60
Low-Income (297)	62	57
African Am/Black (69)	67	53
Asian (779)	89	89
Hispanic/Latino (189)	63	65
White (1,725)	78	76

7. District Subgroup Performance –ELA MCAS 2016 Grade 10

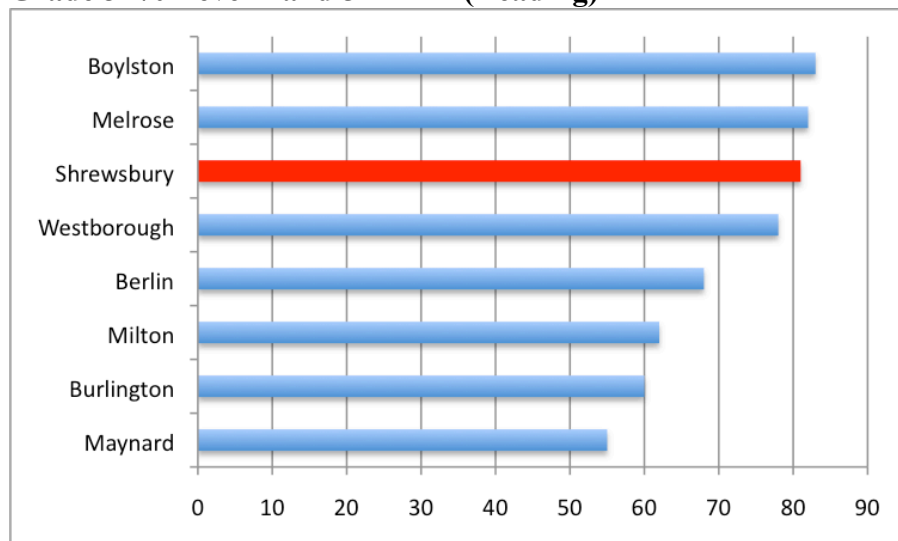
AYP Subgroup (2016)	Shrewsbury %Adv./Prof. 2015	Shrewsbury %Adv./Prof. 2016	State %Adv./Prof. 2016
All Students (435)	97	96	92
Stud. w/Disab. (58)	77	77	68
LEP/FLEP (8)	No data	No data	61
Low-Income (39)	97	92	83
African Am/Black (9)	No data	No data	86
Asian (76)	100	95	94
Hispanic/Latino (28)	95	85	80
White (309)	96	97	95

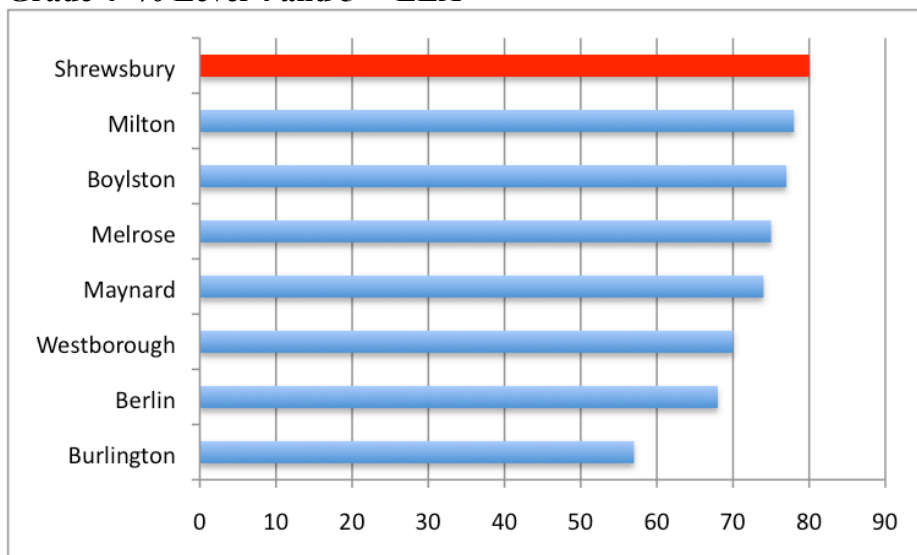
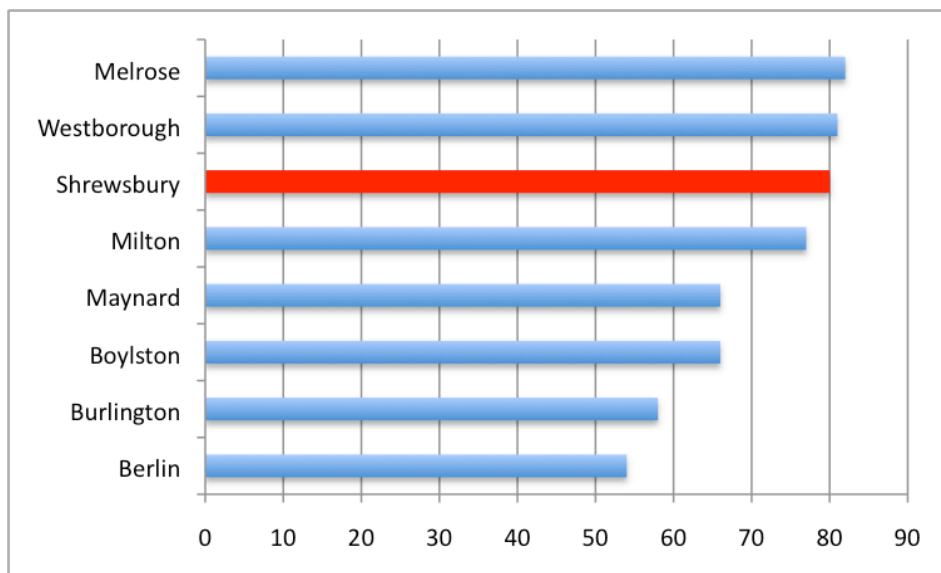
8. District Comparisons % Level 4 and 5 – ELA

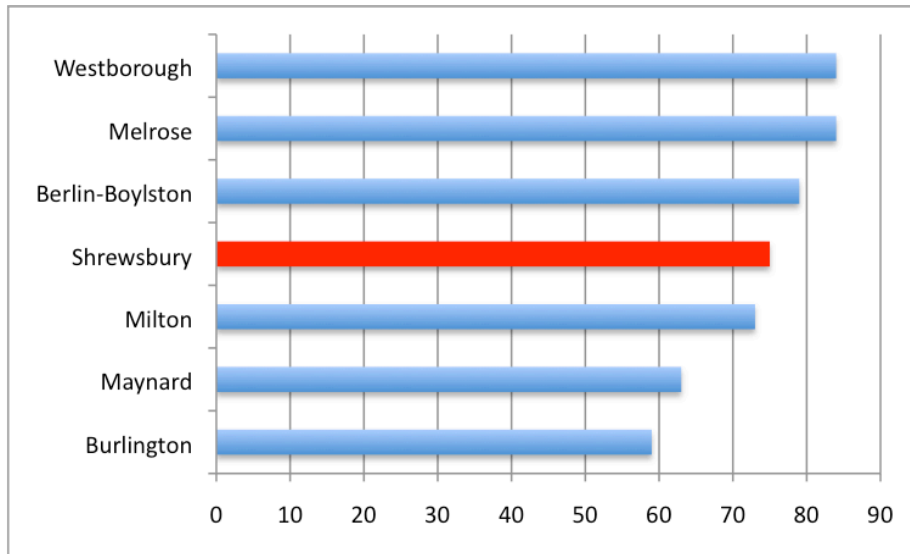
The following graphs focus on achievement in English language arts and illustrate Shrewsbury's grade level performance (2016) in the area of combined Level 4 and Level 5 percentiles in comparison to other districts that administered PARCC in the Spring of 2016. Comparison Districts were selected if they were in either in the Assabet Valley Collaborative or if they were designated as comparison districts by the DESE.

Shrewsbury's ranking ranged from first (grades four) to fourth (grade six) in regards to these comparison districts.

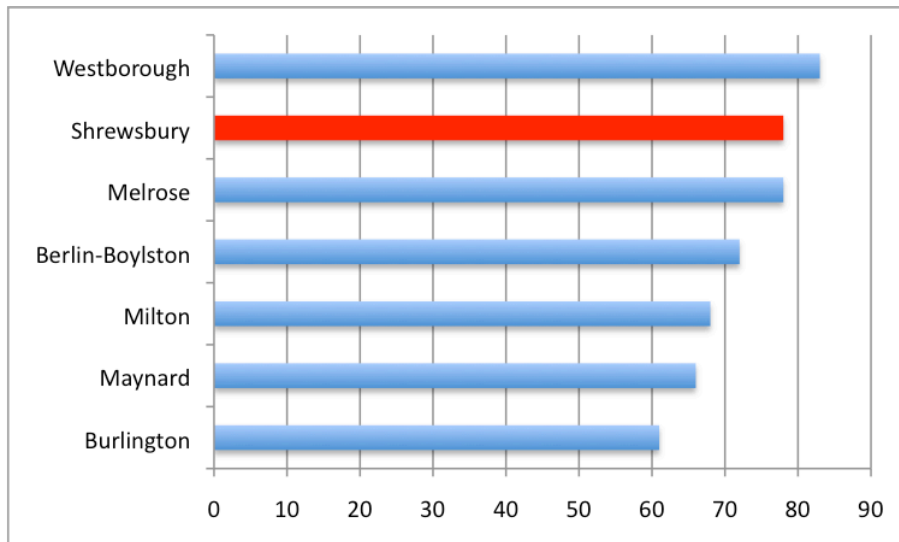
Grade 3 % Level 4 and 5 – ELA (Reading)



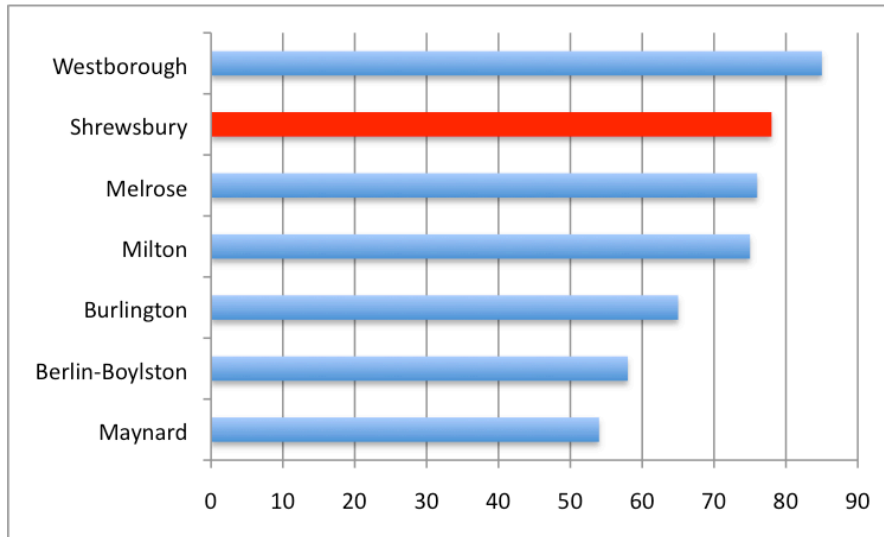
Grade 4 % Level 4 and 5 – ELA**Grade 5 % Level 4 and 5 – ELA****Grade 6 % Level 4 and 5 – ELA**



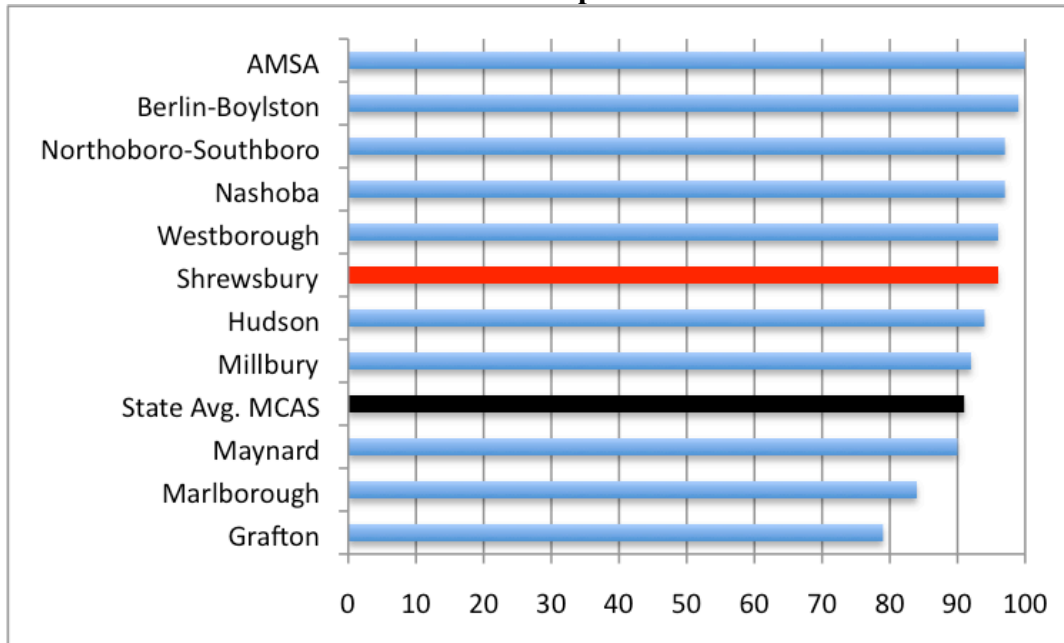
Grade 7 % Level 4 and 5 – ELA



Grade 8 % Level 4 and 5 – ELA



Grade 10 % Advanced & Proficient Comparisons – ELA



Performance Results – Math

The performance results section is broken down by subject area and each section includes the following components:

Five-year history of Shrewsbury's MCAS/PARCC results in Mathematics

Five -year history of *Advanced/Proficient* (Grade 10 MCAS only)

Five-year history of *Advanced* (Grade 10 MCAS only)

District Subgroup Performance

District % Level 4/Level 5 (Grades 3-8) and Advanced/Proficient Comparison (Grade 10)

1. Five-year history of Shrewsbury's MCAS/PARCC results in Mathematics

Grade 3 Mathematics

	Advanced	Proficient	Needs Improvement	Warning	
2012	64	24	8	4	
2013	59	29	8	4	
2014	56	30	9	5	
	Level 5	Level 4	Level 3	Level 2	Level 1
2015	34	43	16	4	2
2016	42	44	7	6	1

Grade 4 Mathematics

	Advanced	Proficient	Needs Improvement	Warning	
2012	44	40	13	3	
2013	42	36	19	3	
2014	47	34	16	3	
	Level 5	Level 4	Level 3	Level 2	Level 1
2015	25	55	16	4	1
2016	27	51	15	5	1

Grade 5 Mathematics

	Advanced	Proficient	Needs Improvement	Warning	
2012	48	30	15	7	
2013	49	30	16	5	
2014	51	30	14	5	
	Level 1	Level 2	Level 3	Level 4	Level 5
2015	22	50	19	7	2
2016	25	51	17	6	1

Grade 6 Mathematics

	Advanced	Proficient	Needs Improvement	Warning	
2012	58	25	11	5	
2013	51	32	13	4	
2014	54	27	13	6	
	Level 5	Level 4	Level 3	Level 3	Level 1
2015	16	53	21	9	1
2016	19	50	17	12	2

Grade 7 Mathematics

	Advanced	Proficient	Needs Improvement	Warning	
2012	43	33	16	7	
2013	40	35	17	8	
2014	26	43	19	11	
	Level 5	Level 4	Level 3	Level 2	Level 1
2015	12	50	27	10	2
2016	14	49	27	8	2

Grade 8 Mathematics

	Advanced	Proficient	Needs Improvement	Warning	
2012	46	30	17	7	
2013	50	27	14	8	
2014	35	38	19	8	
	Level 5	Level 4	Level 3	Level 2	Level 1
2015	17	52	18	9	3
2016	22	50	15	8	5

Grade 10 Mathematics

	Advanced	Proficient	Needs Improvement	Failing
2012	74	19	5	3
2013	80	13	4	3
2014	81	14	3	1
2015	79	13	6	2
2016	76	17	4	3

2. Combined Performance in Level 4 and Level 5 Categories for PARCC Math Grades 3-8

% Students Scoring Level 4 and Level 5 in PARCC Mathematics

Grade and Subject	Gr 3 Math % Level 4/5.	Gr 4 Math % Level 4/5.	Gr 5 Math % Level 4/5.	Gr 6 Math % Level 4/5.	Gr 7 Math % Level 4/5.	Gr 8 Math % Level 4/5.
Shrewsbury % Level 4/5 2015	77	80	72	69	62	69
Shrewsbury % Level 4/5 2016	86	78	76	69	63	72

3. Performance in Level 5 Category for PARCC Math Grades 3-8

% Students Scoring Level 5 in PARCC Mathematics

Grade and Subject	Gr 3 Math % Level 5	Gr 4 Math % Level 5	Gr 5 Math % Level 5	Gr 6 Math % Level 5	Gr 7 Math % Level 5	Gr 8 Math % Level 5
Shrewsbury % Level 5 2015	34	25	22	16	12	17
Shrewsbury % Level 5 2016	42	27	25	19	14	22

4. 5 Year History of Combined Performance in Advanced/Proficient Categories (Grade 10 Mathematics MCAS only)

	Shrewsbury % Adv/Pro. 2012	Shrewsbury % Adv/Pro. 2013	Shrewsbury % Adv/Pro. 2014	Shrewsbury % Adv/Pro.. 2015	Shrewsbury % Adv/Pro.. 2016	% Change 15-16	State Avg. 2016 %Adv/Pro
Grade 10 Math	93	93	95	91	92	+1	78

5. 5-year History of Advanced Category (Grade 10 Mathematics MCAS only)

	% of students Advanced 2012	% of students Advanced 2013	% of students Advanced 2014	% of students Advanced 2015	% of students Advanced 2016	% Change 15-16	State % of students Advanced 2016
Grade 10 Math	74	80	81	79	76	-3	54

District Subgroup Performance – Math PARCC 2016 Grades 3-8

Currently, state average sub-group data for the Spring 2016 administration of PARCC is not available. The 2016 data reflects Grades 3-8 ELA only.

AYP Subgroup (2016)	Shrewsbury % Level 4/5 2015	Shrewsbury % Level 4/5 2016
All Students (2,857)	71	74
Stud. w/Disab. (392)	25	26
LEP/FLEP (175)	59	59
Low-Income (297)	49	50
African Am/Black (69)	53	45
Asian (779)	90	91
Hispanic/Latino (189)	42	48
White (1,725)	67	70

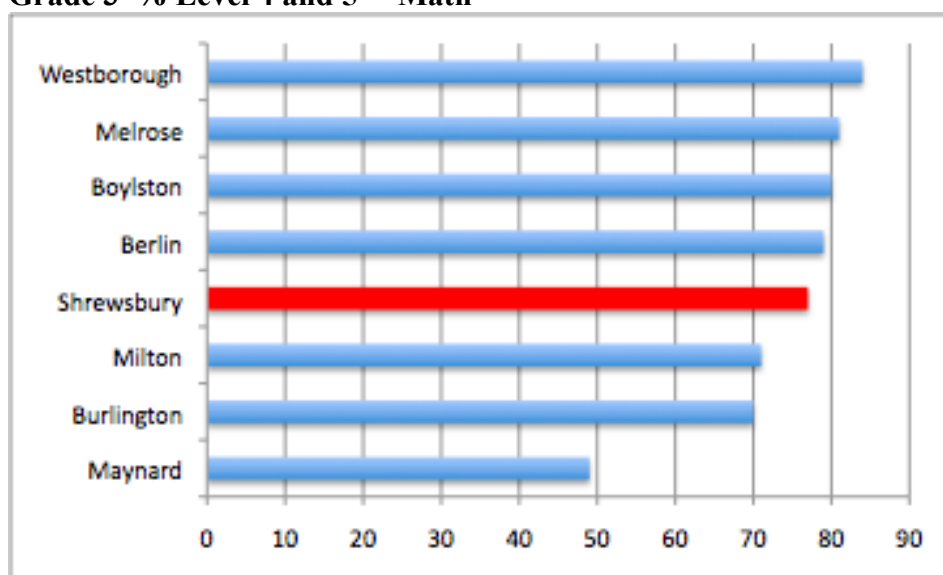
4. District Subgroup Performance – Grade 10 Mathematics MCAS

AYP Subgroup (2016)	Shrewsbury % Adv./Prof. 2015	Shrewsbury % Adv./Prof. 2016	State Avg %Adv/Pro 2016
All Students (435)	92	93	78
Stud. w/Disab. (57)	53	56	39
LEP/FLEP (9)	not reported	not reported	
Low-Income (38)	83	87	84
African Am/Black (9)	80	not reported	62
Asian (76)	96	96	91
Hispanic/Latino (29)	73	76	56
White (308)	91	93	85

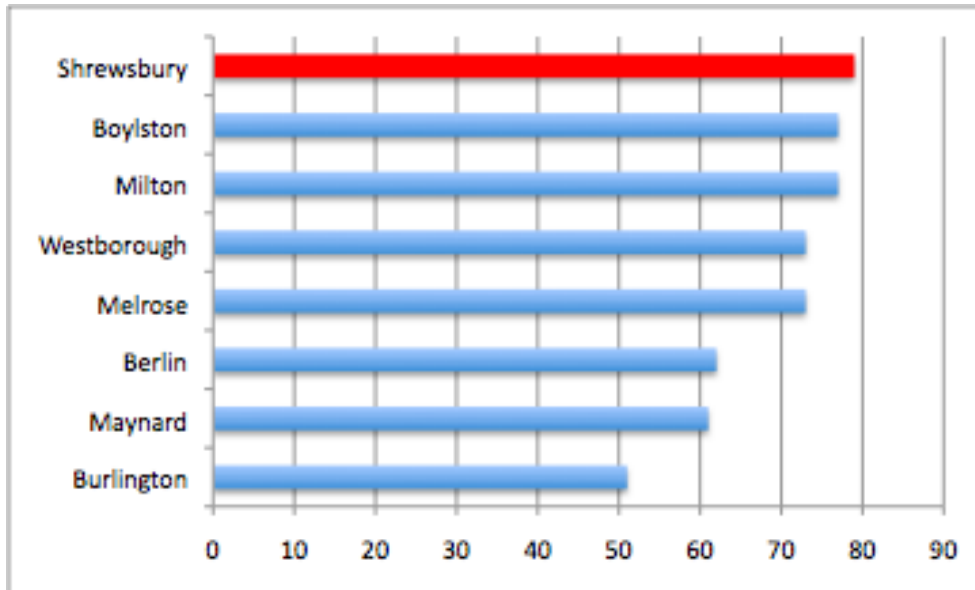
5. District % Advanced & Proficient Comparison - Math

The following graphs focus on achievement in Mathematics and illustrate Shrewsbury's grade level performance (2016) in the area of combined Level 4 and Level 5 percentiles in comparison to other districts that also administer PARCC in the Spring of 2016. Comparison Districts were selected if they were in either in the Assabet Valley Collaborative or if they were designated as comparison districts by the DESE.

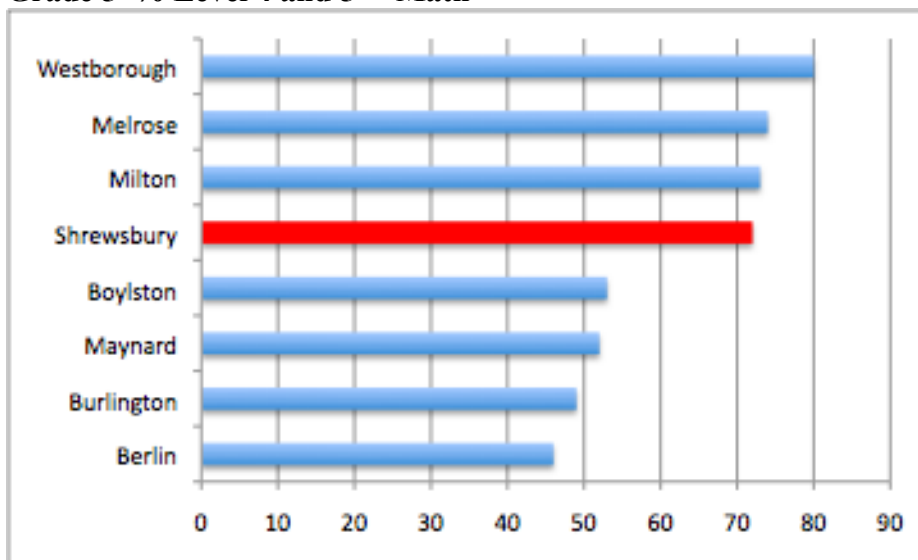
Grade 3 % Level 4 and 5 – Math



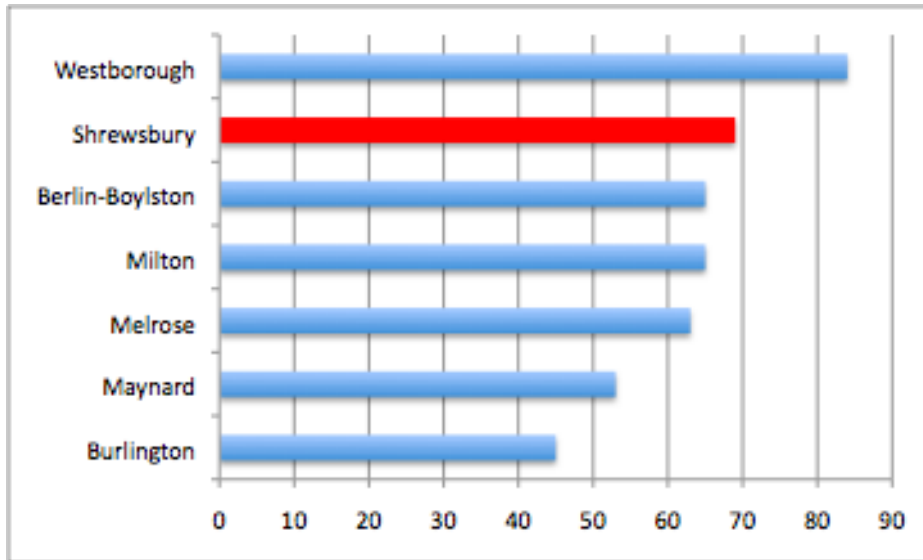
Grade 4 % Level 4 and 5 – Math



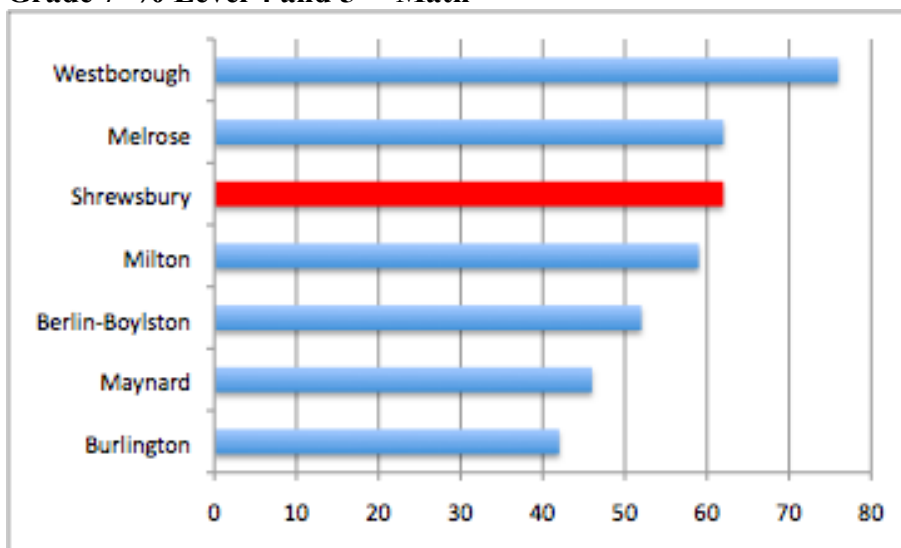
Grade 5 % Level 4 and 5 – Math



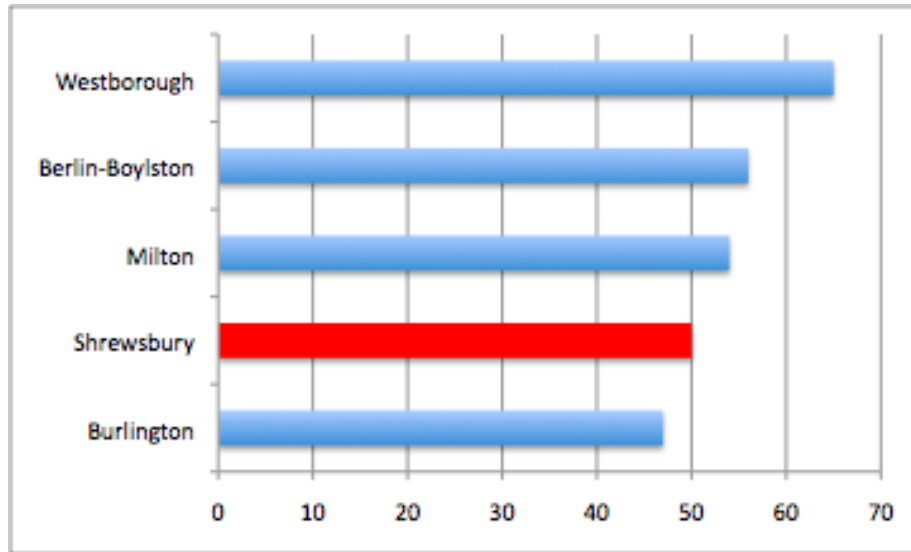
Grade 6 % Level 4 and 5 – Math



Grade 7 % Level 4 and 5 – Math

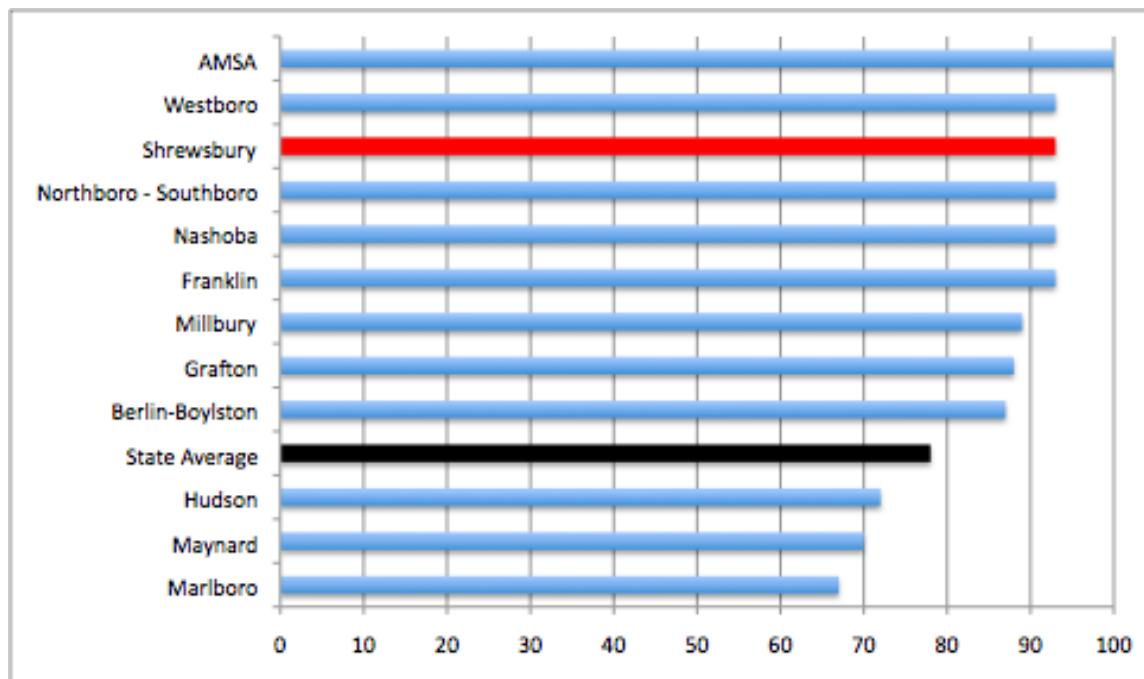


Grade 8 % Level 4 and 5 – Math*



*Note: Maynard and Melrose were not included in the Grade 8 comparison graph because some grade 8 students took the Grade 8 PARCC and some took the Algebra 1 PARCC.

Grade 10 % Advanced & Proficient Comparison – Math 2016



Performance Results – Science & Technology

Because the science and technology test is only administered in grades five, eight, and nine/ten there is no growth data produced for this testing area.

The eighth grade student performance continues to be an area of focus. Student performance has stayed pretty consistent over the last five years and there is a recognition that other districts are performing better than Shrewsbury on this measure. Both our elementary and middle level science programs are currently in transition to the new Massachusetts Science Frameworks (2016) that place a large emphasis on the scientific practices. The district is using the current MCAS data to guide work in aligning our program to the most important science topics and looking for gaps in the curriculum; however, there is also a recognition that the current MCAS is more focused on content rather than the scientific practices. Our middle school science teachers have been developing and using more internal measures to assess student progress with the practices. Our 8th grade students scored 78% Moderate to High Growth on an Inquiry Benchmark that is administered at the beginning and end of 8th grade to measure a student's ability to use data collected in an experiment to make a claim and support it with scientific evidence and reasoning.

1. Five-year history of Shrewsbury's MCAS results in Science & Technology Summary

Grade 5 Science and Technology

	Advanced	Proficient	Needs Improvement	Warning
2012	44	33	20	4
2013	39	34	23	4
2014	31	41	23	4
2015	31	40	25	4
2016	34	36	24	7

Grade 8 Science and Technology

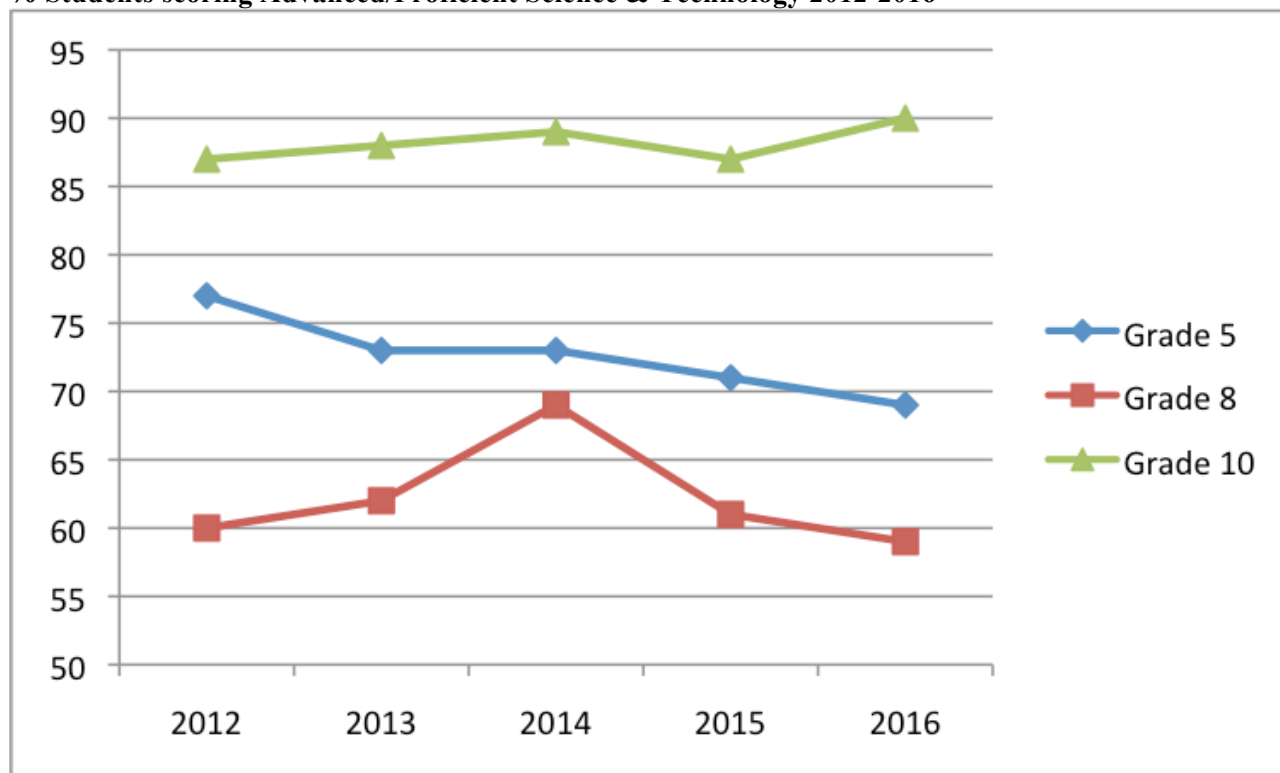
	Advanced	Proficient	Needs Improvement	Warning
2012	10	50	32	8
2013	13	50	31	7
2014	14	55	26	5
2015	9	53	33	6
2016	12	47	33	8

Grade 10 Science and Technology

	Advanced	Proficient	Needs Improvement	Warning
2012	45	42	10	2
2013	46	42	10	1
2014	50	39	10	1
2015	46	40	12	1
2016	54	36	8	2

2. Combined Performance in Advanced/Proficient Categories

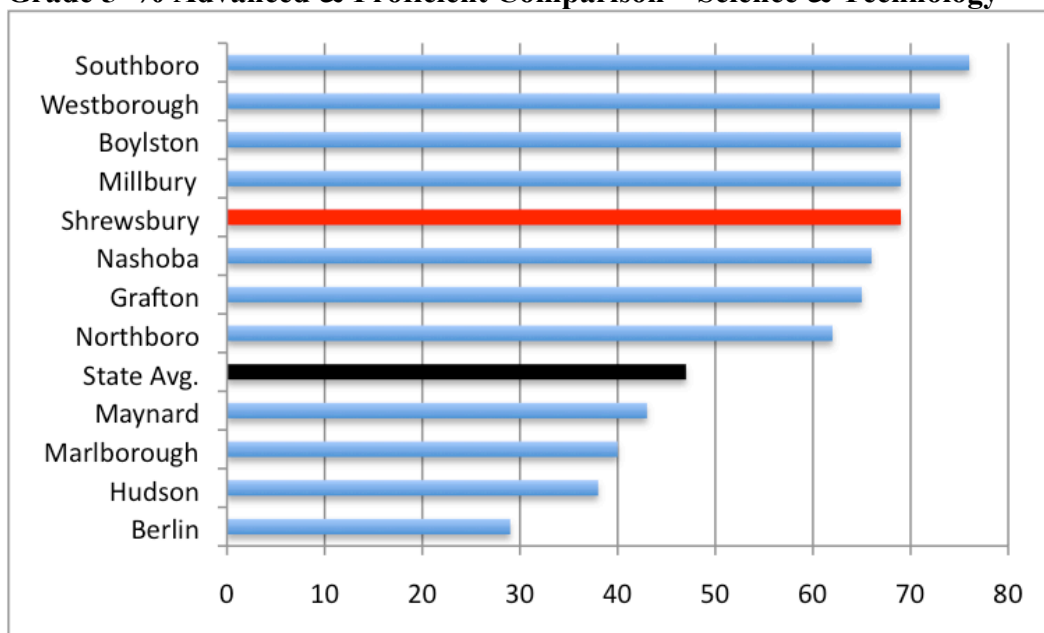
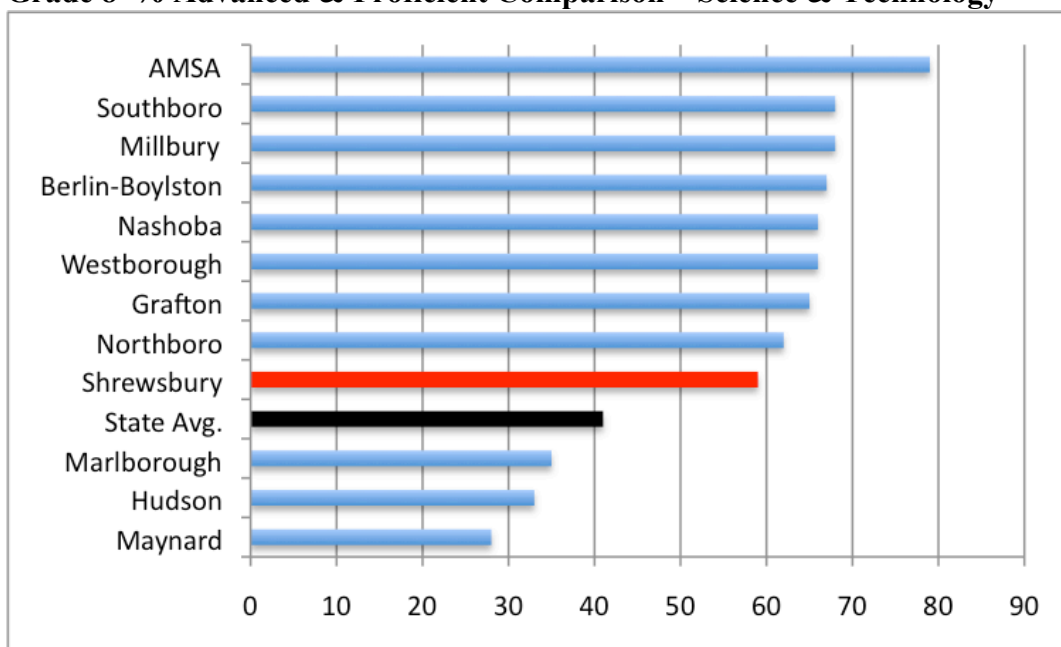
Grade and Subject	Shrewsbury % Advanced /Proficient 2012	Shrewsbury % Advanced /Proficient 2013	Shrewsbury % Advanced /Proficient 2014	Shrewsbury % Advanced /Proficient 2015	Shrewsbury % Advanced /Proficient 2016	% Change from 15-16	State Avg. 2016 %Adv/Pro.
Grade 5 Science/Tech	77	73	73	71	70	-1	47
Grade 8 Science/Tech	60	62	69	61	59	-2	41
Grade 10 Science/Tech	87	88	89	87	90	+3	73

% Students scoring Advanced/Proficient Science & Technology 2012-2016

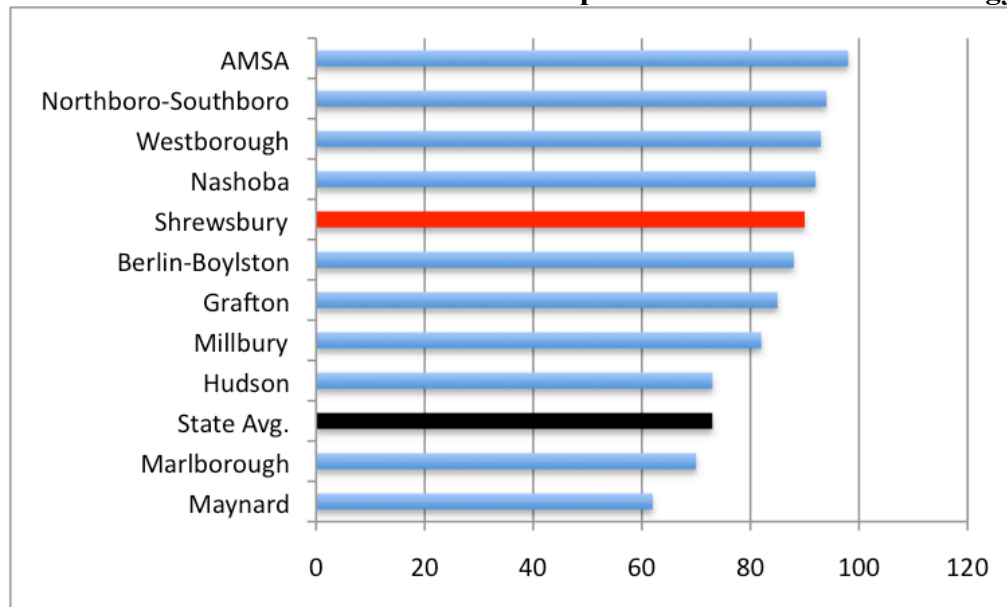
3. District % Advanced & Proficient Comparison – Science & Technology

Summary

The following graphs compare Shrewsbury's performance (2016) to districts within the Assabet Valley. The graphs focus on combined advanced and proficient achievement in science & technology.

Grade 5 % Advanced & Proficient Comparison – Science & Technology**Grade 8 % Advanced & Proficient Comparison – Science & Technology**

Grade 10 % Advanced & Proficient Comparison – Science & Technology



Growth Model Results

Introduction

Originally, MCAS results had only been provided in absolute measures and provided insight into how individual students, as well as groups of students, performed in terms of state curriculum standards. Attempts to quantify individual and cohort growth based on traditional MCAS data had been highly speculative. Massachusetts now utilizes a growth model system to measure growth.

By utilizing a growth model system, the state is attempting to do a better job answering the question, “How much academic progress did a student or group of students make in one year as measured by MCAS?”. This measure of student growth provides us with additional information that helps us better answer this question within the district and build on the exceptional instruction being provided.

The use of growth model percentiles helps the state (and districts) put MCAS achievement into greater context. MCAS achievement scores answer one central question, “How did a student fare relative to grade level standards in a given year?”. MCAS student growth percentiles add another layer of understanding, providing a measure of how a student changed from one year to the next relative to other students with similar MCAS test score histories.

The term ‘growth model’ describes a method of measuring student growth by tracking their progress on MCAS from one year to the next. Students are tracked by comparing their individual performance on MCAS testing to the performance of their ‘academic peers,’ those students who have similar MCAS score histories. Student growth percentiles range from 1 to 99, higher numbers represent higher levels of growth and lower numbers represent lower levels of growth.

The growth model method operates independently of MCAS performance levels. Therefore, all students, no matter what their scores were on past MCAS tests, have an equal chance to demonstrate growth at any of the 99 percentiles on the next year’s test. Growth percentiles are calculated in ELA and mathematics for students in grades 4 through 8 and 10. The state’s growth model requires at least two years of MCAS results to calculate growth percentiles. Therefore no growth scores are available for grade 3.

Individual Student Examples

The growth model measures change in performance rather than absolute performance. This change is measured in percentiles that provide values that express the percentage of cases that fall below a certain score. For example:

- A student with a growth percentile of 80 in 5th grade mathematics grew as much or more than 80 percent of her academic peers (students with similar score histories) from the 3rd and 4th grade math MCAS to the 5th grade math MCAS. Only 20% of her academic peers grew more in math than she did.
- A student with a growth percentile of 33 in 8th grade ELA grew as well or better than 33 percent of his academic peers (students with similar score histories) from the 6th and 7th grade ELA MCAS to the 8th grade ELA MCAS. This student grew less than 67% of his academic peers.

Aggregate Growth Percentiles

While student growth percentiles enable educators to chart the growth of an individual student compared to that of academic peers, student growth percentiles may also be aggregated to understand growth at the subgroup, school, or district level.

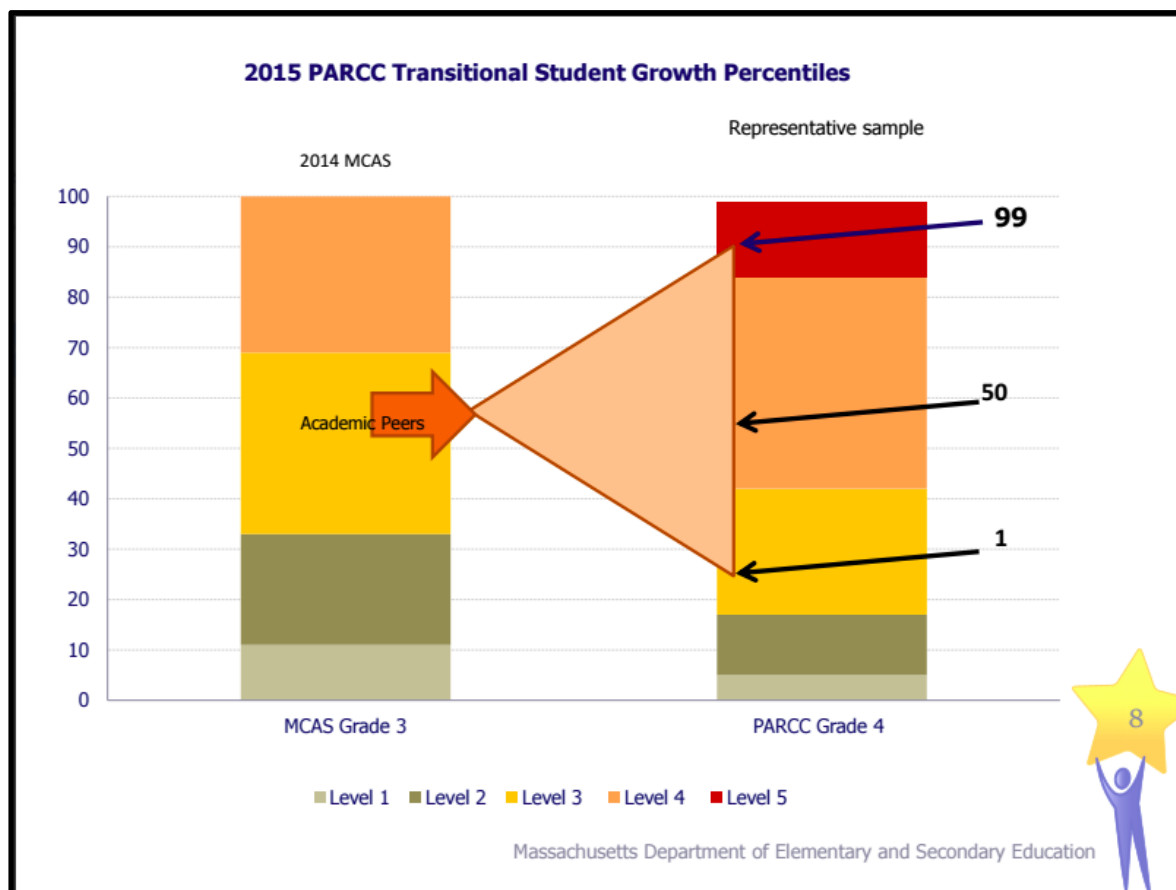
The most effective way to report growth for a group is through the use of the median student growth percentile (the middle score if one ranks the individual student growth percentiles from highest to lowest). A typical school or district in the commonwealth would have a median student growth percentile of 50.

When using student growth percentiles, it is important to be aware that the statistic and interpretation does not change. For example, if we look at the student growth percentile of low-income status students at the district level we see that this group’s median student growth percentile is 56. This means that this particular group of students, on average, achieved higher

than their academic peers – a group of students with similar MCAS test score histories. It does not mean that our low-income students improved more than 56 percent of other low-income status students, nor does it mean that this particular group of students improved more than 56 percent of non low-income status students, it simply means that in comparison to other students with similar score histories, our low-income status students improved more than 56 percent of their academic peers.

Transitional Student Growth Percentiles and PARCC

This score is generated using current PARCC and prior MCAS scores. Focus is on the change in achievement of students and groups of students over time. Growth is determined relative to performance of statewide academic peers - students or groups with similar performance histories. SGP > 60 is considered “high” growth.



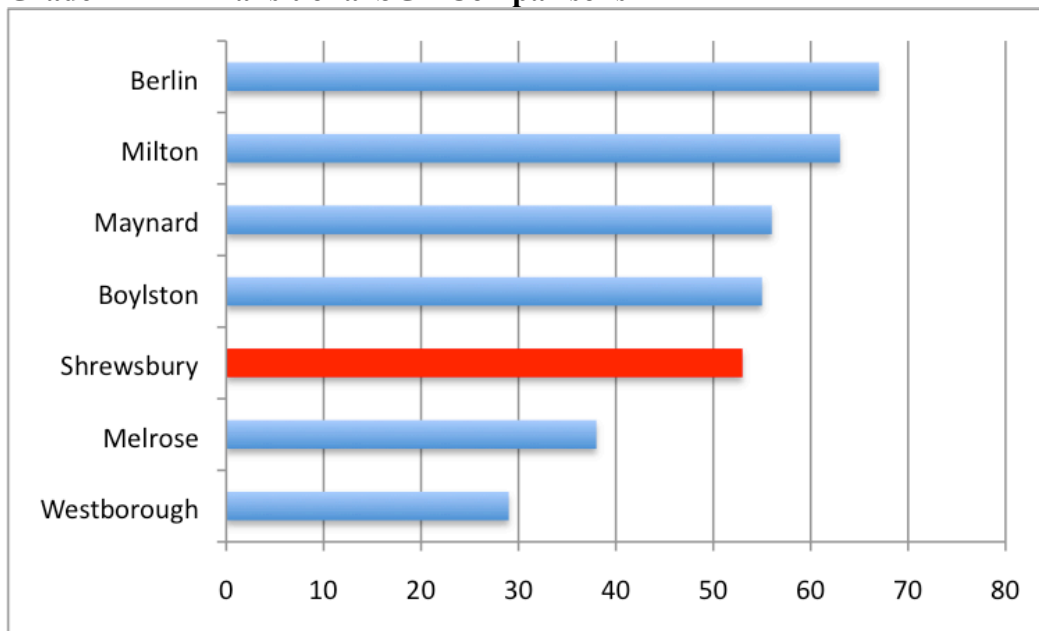
Growth Model Results – ELA

Transitional Student Growth Percentile (SGP) Comparison – ELA

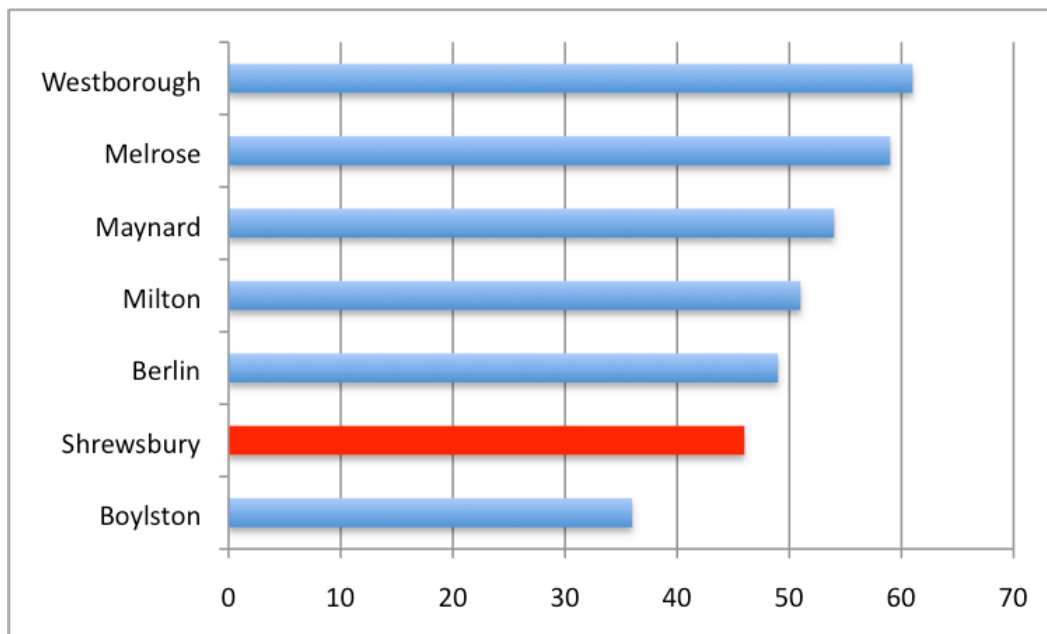
Grade and Subject	Shrewsbury Median SGP 2012	Shrewsbury Median SGP 2013	Shrewsbury Median SGP 2014	Shrewsbury Median SGP 2015	Shrewsbury Median SGP 2016	% Change 2015-2016
Grade 3 ELA	N/A	N/A	N/A	N/A	N/A	N/A
Grade 4 ELA	83	77	65	69	53	-16
Grade 5 ELA	49	42	45	37	46	+9
Grade 6 ELA	63	55.5	50	46	46	0
Grade 7 ELA	50	46.5	42	36.5	34	-2.5
Grade 8 ELA	49.5	48	51	50	45	-5
Grade 10 ELA	58	60	54	53	45.5	-7.5
All Grades ELA	59	54	52	N/A	N/A	N/A

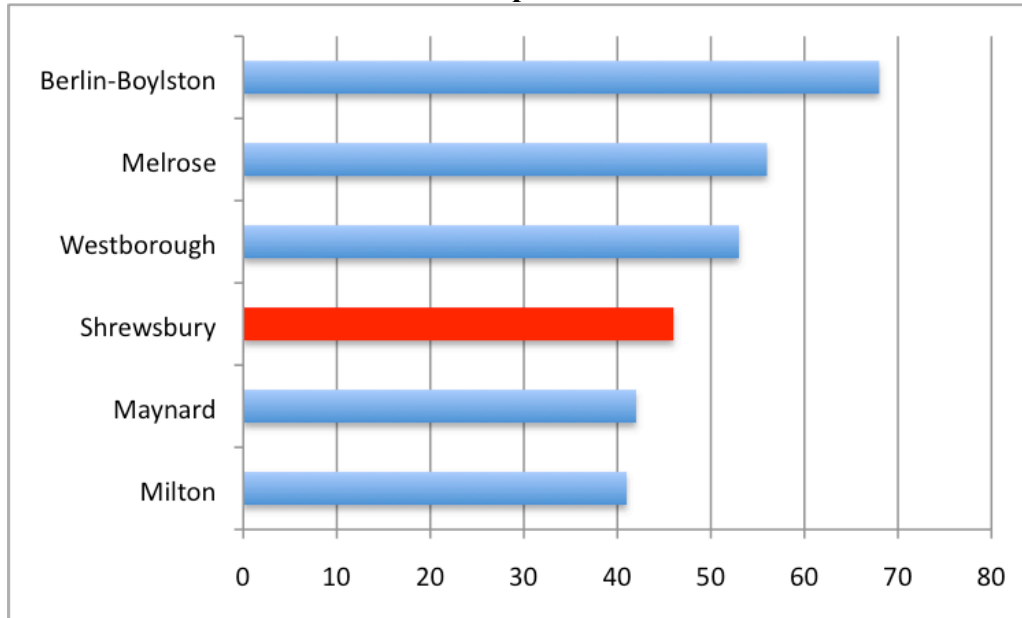
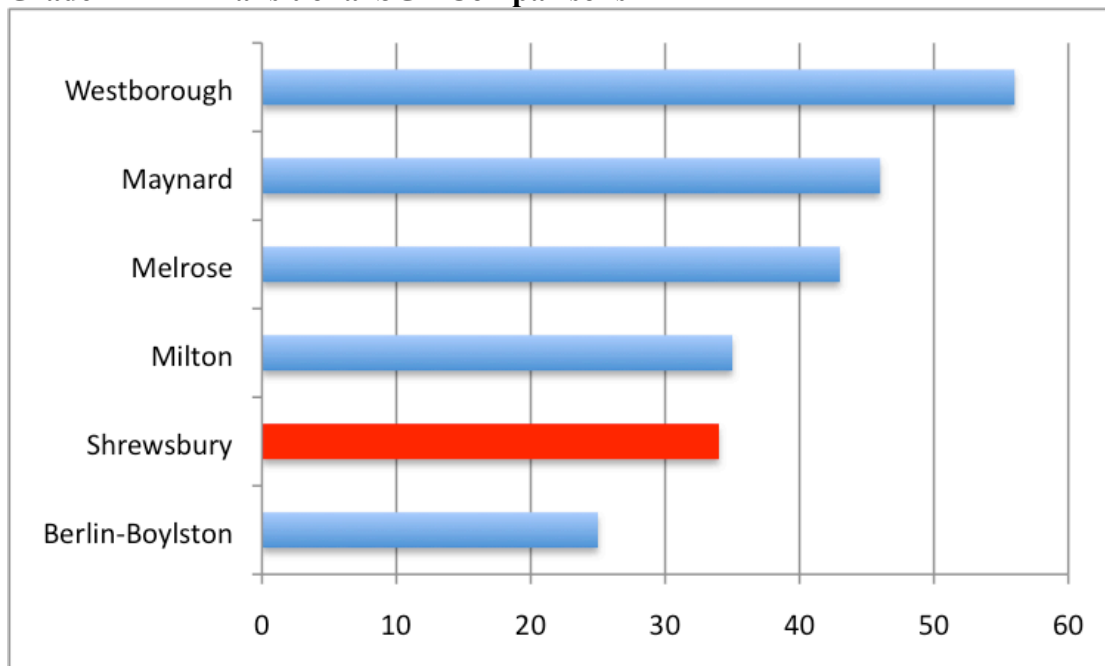
District Growth Comparison – English Language Arts

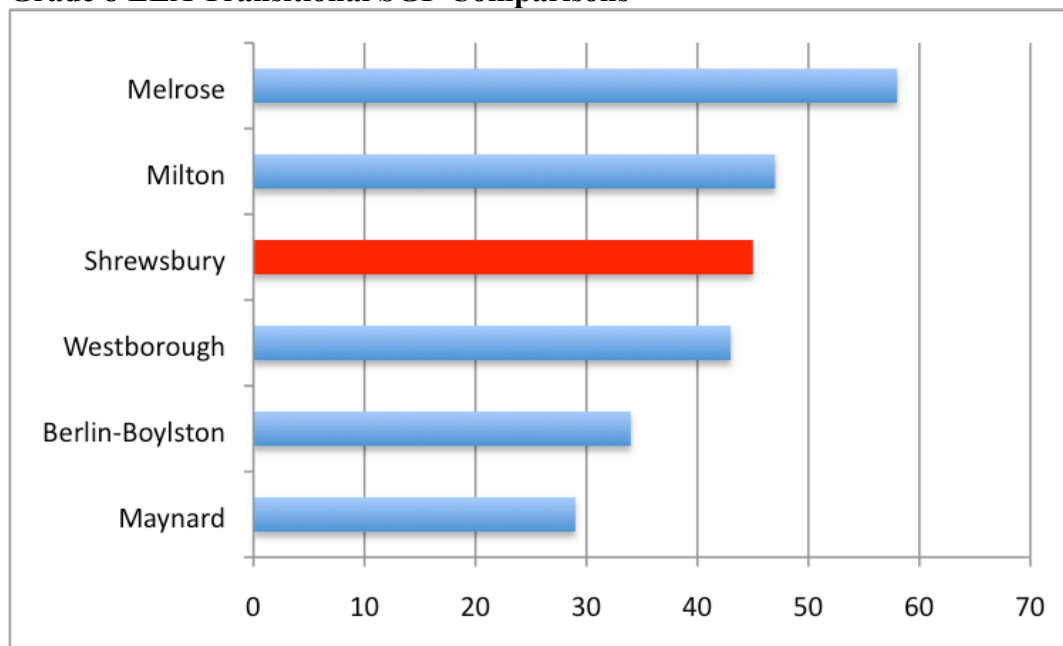
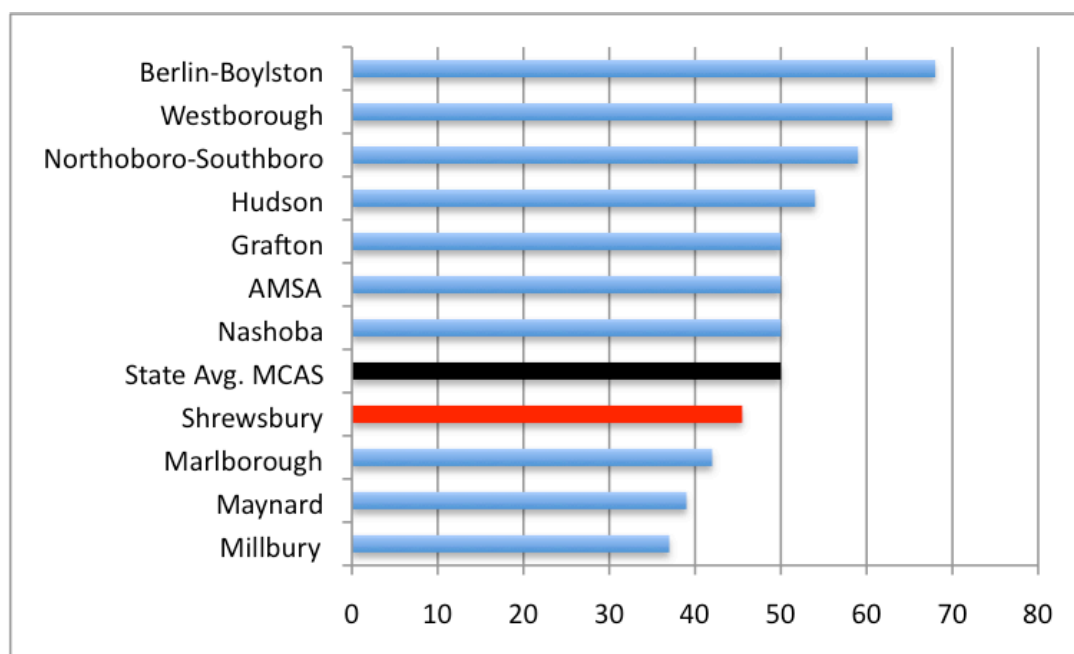
Grade 4 ELA Transitional SGP Comparisons



Grade 5 ELA Transitional SGP Comparisons



Grade 6 ELA Transitional SGP Comparisons**Grade 7 ELA Transitional SGP Comparisons**

Grade 8 ELA Transitional SGP Comparisons**Grade 10 ELA SGP Comparisons**

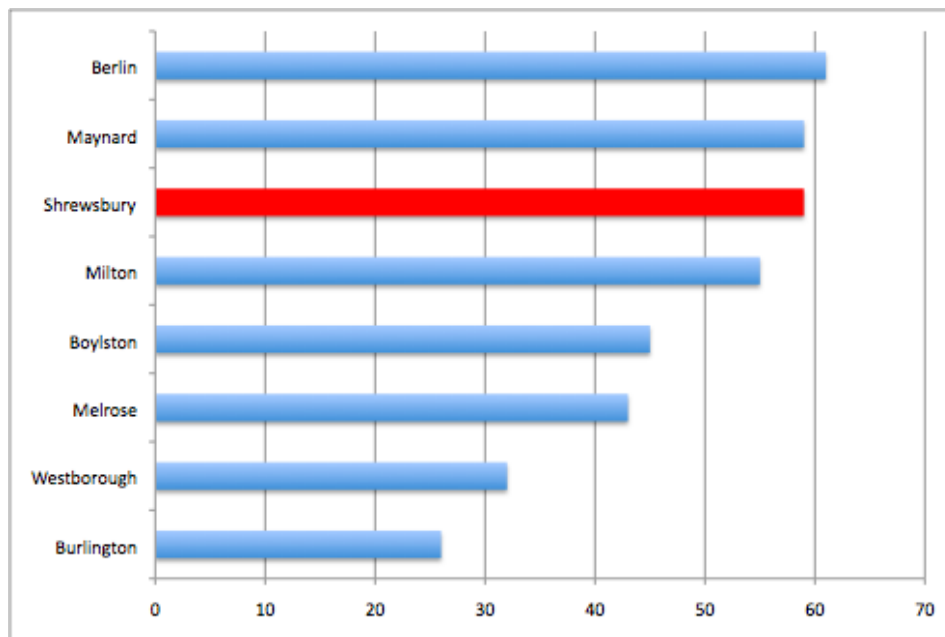
Growth Model Results – Math

Transitional Student Growth Percentile (SGP) Comparison – Mathematics

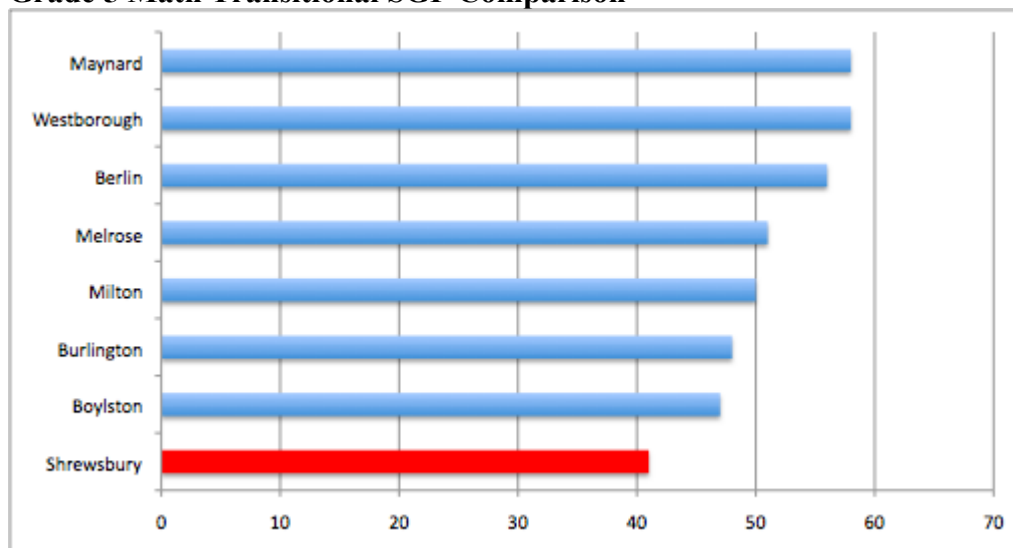
Grade and Subject	Shrewsbury Median SGP 2012	Shrewsbury Median SGP 2013	Shrewsbury Median SGP 2014	Shrewsbury Median SGP 2015	Shrewsbury Median SGP 2016	% Change 2015-2016
Grade 3 Math	N/A	N/A	N/A	N/A		N/A
Grade 4 Math	69	58	67	65	59	-6
Grade 5 Math	46	42	45	44	41	-3
Grade 6 Math	66.5	57	53.5	38	38	0
Grade 7 Math	55.5	42	36	30	38	+8
Grade 8 Math	52.5	61	45	39	50	+11
Grade 10 Math	54	55	62	53	58	+5
All Grades Math	59	51	50	Not Available	Not Available	N/A

District Growth Comparison – Mathematics

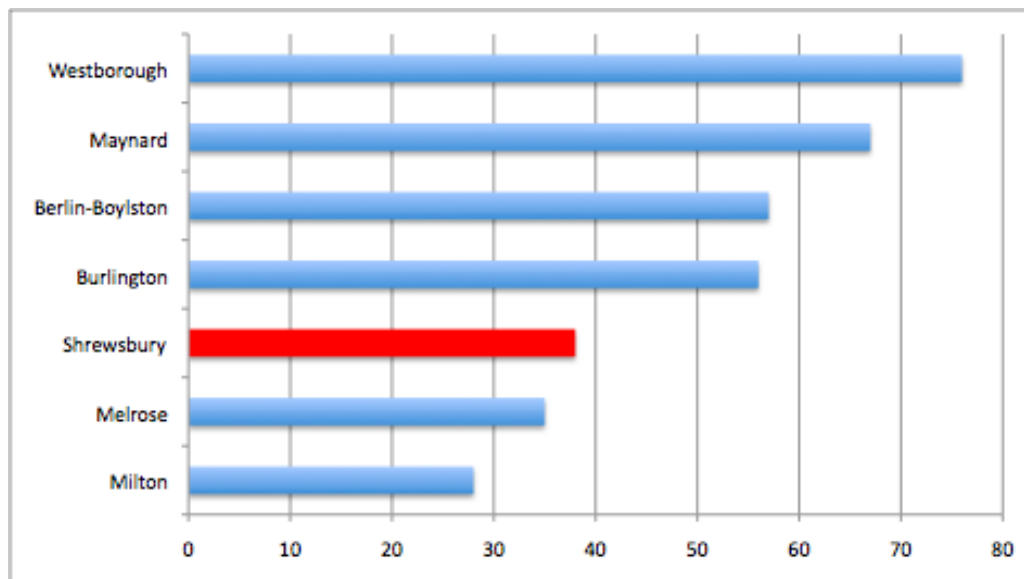
Grade 4 Math Transitional SGP Comparison



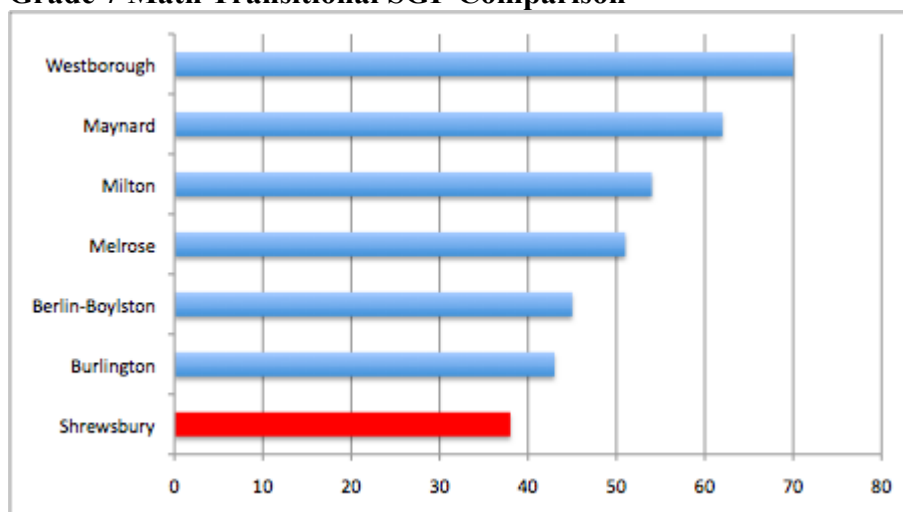
Grade 5 Math Transitional SGP Comparison



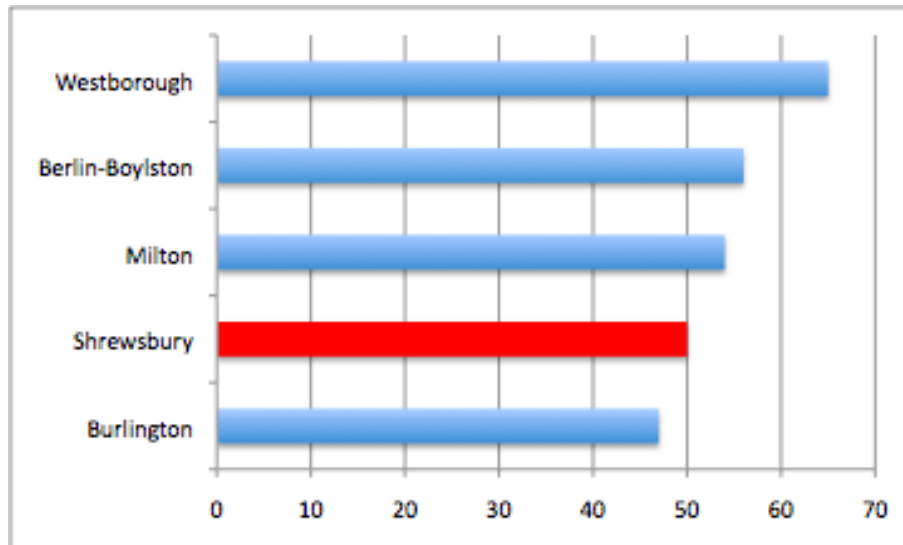
Grade 6 Math Transitional SGP Comparison



Grade 7 Math Transitional SGP Comparison

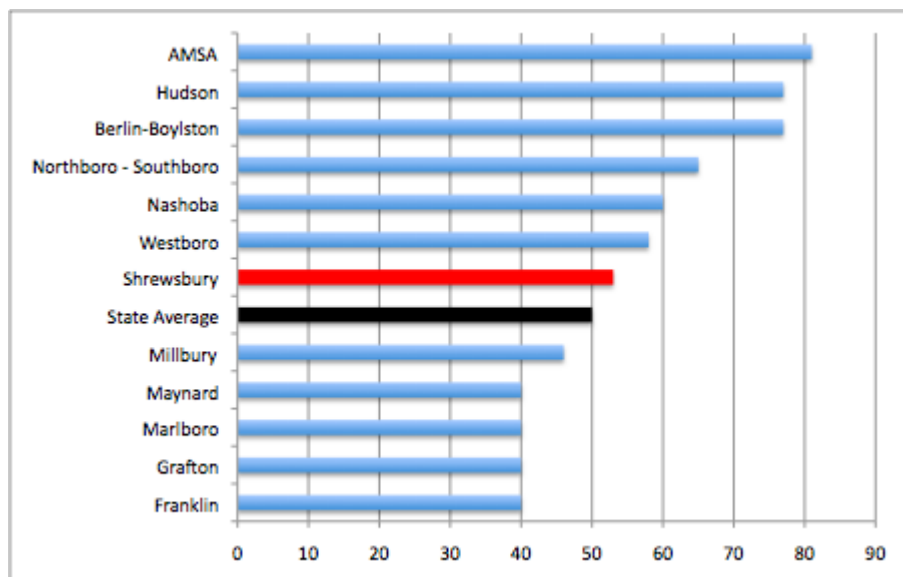


Grade 8 Math Transitional SGP Comparison*



*Note: Maynard and Melrose were not included in Transitional SGP chart comparison because some students took the Grade 8 test and some took the Algebra 1 test.

Grade 10 Math SGP Comparison



Looking Forward

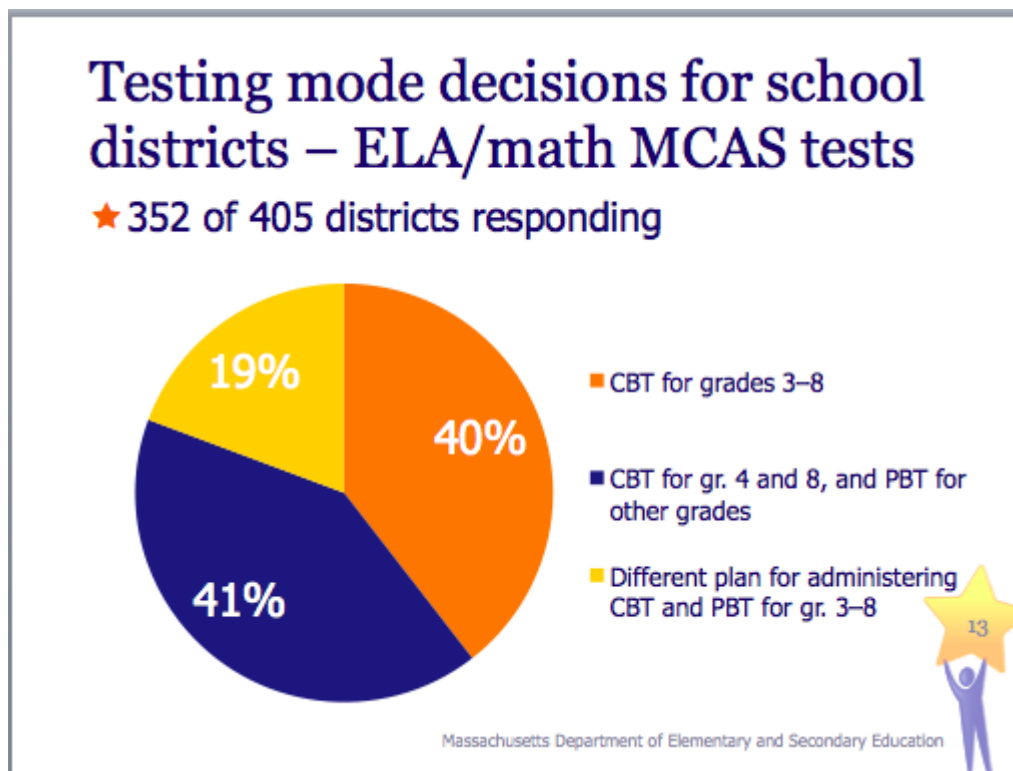
- The 2017 assessment is transitioning from PARCC to MCAS 2.0. While MCAS 2.0 is built off of the PARCC platform, there will be adjustments to the content and structure of the PARCC exam that our students have taken for the past two years. The 2015 and 2016 PARCC exams were timed tests; the 2017 MCAS 2.0 will be untimed. Specific details around the ELA and Math tests were released in November and webinars to review these details will take place the 2nd week in December. To see the released information about the MCAS 2.0 ELA and Math exams, please click on the links below.

MCAS 2.0 ELA: <http://www.doe.mass.edu/mcas/tdd/ela.html?section=testdesign>

MCAS 2.0 Math: <http://www.doe.mass.edu/mcas/tdd/math.html?section=testdesign>

- For the 2017 MCAS 2.0 test administration, the state is requiring that all districts use the computer based version of the test in grades 4 and 8. As Shrewsbury has been testing on-line in grades 5-8 for the past two years, our district will now shift to include grade 4 in its

computer based testing program. Grade 3 will continue to be paper based. Please see the chart below for a breakdown of how other districts are handling the testing mode question.



- The DESE released new Science Standards last year that will require substantial adjustments to our elementary and middle level science programs. A K-12 committee has been formed to review the Shrewsbury science curriculum and to prepare for the changes anticipated with new state standards. Elementary and middle level working groups are underway to inform future adjustments to our PreK-8 science programming.
- Once the MCAS 2.0 assessment system matures and Shrewsbury is able to receive item level analysis information, our educators will be able to better assess and respond to any areas of challenge that are identified in student performance data.